PHENIX
Territorial Library 1909

Mohave County Miner.

VOL. XXXI. KINGMAN, ARIZONA, SATURDAY, JUNE 21. 1913. NO. 38

Great Smelter Started.

If General Manager John C. Greenway and other officers of the Calumet and Arizona Copper Mining company felt a glow of pride last Monday—well, it would have been sort of unnatural if they hadn't felt it, even if they are in the habit of doing big things. No resident of Arizona, even if not directly interested in the great enterprise, could gaze on that vast structure of steel, with its powerful machinery and devices, representing, as they do an outlay of from 2,000,000$ to 3,000,000$, and the ingenuity of great minds, without a sentiment of pride manifesting itself. To build and equip with all the latest improvements a smelter which can handle 2,400 tons of ore daily requires not only capital, but also the direction of the greatest experts in that line obtainable.

According to men who are supposed to be qualified to express an opinion on the subject the C. and A. Co. has as its general manager one of the very ablest all-round copper mining men that ever came into the Southwest. He is a great executive manager, so we are told by many, as well as a practical mining engineer of more than unusual ability. Personally, we know that he is immensely popular with his employes and the citizens generally of Warren district. This counts for a great deal when a man has charge of such stupendous interests as John C. Greenway has. Temperamentally he is peculiarly fitted for such a position. Physically a splendid specimen of manhood, and just in the prime of life he typifies energy and alertness in his every movement; he is quick and decisive on every point of business, but withal he is affable and considerate in his intercourse with everybody.

But to get back to last Monday's affair. A large crowd gathered in the forenoon to see the smelter near Douglas started up. Bisbee was well represented. Captain Greenway was accompanied in his auto by his mother and sister, Miss Sarah I. Greenway, of Hot Springs, Ark., and Chester A and Mrs. Congdon, of Duluth, Minnesota.

Captain Greenway and his entire staff and many distinguished visitors were the center of a large crowd when Miss Greenway applied a match which started the first fire in the great smelter. H. A. McGregor and Mr. Rippath, who designed the plant, and Harry Clark, who had charge of the construction work, were happy members of the party.

Besides Captain Greenway and his party the following named Bisbee people were present. Messrs. and Mesdames W. B. Gohring, J. E. Curry, Arthur Houle, H. M. Calkins, Mrs. Frank Juliff, Miss Crockett, Miss Combs, Major George Kelly, Dr. Alexander V. Dye, Messrs. Jesse Yoakum, M. J. Cunningham, Paul Stevens, John Rawlins, John Foster, E. W. Beddow, Ira B. Jorelman, Walter Congdon, H. T. Hamilton and Mr. Hage, (representing Dr. Ricketts.)

The second furnace will probably be fired next Monday. The old furnaces will be abandoned as soon as the second new furnace is sufficiently heated for ore. The two blast furnaces in the new plant will treat sixteen hundred tons daily and when the four reverberatory furnaces are ready for action the plant will have a capacity for handling two thousand and four hundred tons daily.

Six converter stands are in place each with a capacity for treating one hundred tons of matte per day. They are of the latest pattern and are lined by the new basic brick method which brings them to the lowest cost of operation.

The ore bedding system is not yet ready for operation, but will be ready when the reverberatory furnaces are put in commission. The ore for the blast furnaces will be carried to them direct by a belt feed system from ore bins for the present.

The smelter is located about 25 miles from Bisbee, where the ore is mined. The longest trains in the world are run between here and the Douglas smelters; 100 cars of 60 tons each often being made up into one train. The difference in elevation is about 1,000 feet, so that these long trains run practically of their own momentum. The smelters are located on the main line of the El Paso Southwestern system, and the saving in freight on machinery, coke, oil, etc., at least equalize the cost of transporting the ore ore from Bisbee. Besides, wells at Douglas furnish abundant water suitable for the boilers and there is plenty of open ground for dumping purposes.

The first furnace of the old smelter of the C. and A. was blown in in 1902. within one year from the blowing in of this furnace two additional ones were installed, and in 1904, a fourth was put in, all of these furnaces being 300-ton, capacity.

Since 1903 the smelter has been in charge of James Wood, as superintendent, who in August of that year resigned the superintendency of the Copper Queen company's smelter to come to the Calumet and Arizona.

For the following brief description of the new plant we are indebted to the International:

While the Calumet and Arizona Smelter included every facility for the economical reduction of the ores then coming from the mine, it was found that the ores in the deeper workings were immense bodies have been encountered and developed, required a different treatment than that required by the original product.

Sometime since Mr. C. H. Rippath and A. G. McGregor, well known engineers, arrived in Douglas and established an office in that city since which time they have employed a force of draftsmen in working out the new Calumet and Arizona smelter to meet all present day requirements, part of which was blown in today.

The new sampling and crushing plant is of steel and concrete throughout, 43x84 feet in dimensions and five stories high. The mill is divided into two sections which may be run independently of each other. Each section has a crushing and sampling department, through which all the ore from the bins passes. The plant is so arranged that sulphides may be crushed down to three-eights of an inch for the roasters, or they may be screened and the coarse lumps sent directly to the blast furnace beds.

The bedding scheme is complete. The four beds for coarse ore have a capacity of 10,000 tons. The three beds for the coke have a capacity of 3,500 tons. The plant is provided with sixteen 18-foot diameter roasters, each having a capacity of 150 tons fine ore per day. These roasters are of the improved wedge furnace style.

The main building is one of the most modern, up-to-date structures that money could build. It is 168x506 feet in dimensions, and so arranged that everything is in the most perfect harmony for the transaction of the business and operation of machinery in one of the greatest smelters in the United States.

Two 48-inch by 40-feet blast furnaces form a part of the equipment, and these are provided with dust chamber 60x140 feet, and 70 feet high, which has the capacity to quickly settle the blast furnace and converter dust.

The reverberatory department has four reverberatories with hearths 19x40 feet, leaving a foundation and space for a fifth furnace. Each is equipped with a waste heat-boiler of 150-horsepower, and space provided for economics.

The main converter aisle is 55 feet wide and equipped with two 40-ton electric traveling cranes, six vertical type converters similar to the Great Fall type being installed.

A steel chimney, lined with brick, 25 feet in diameter and 350 feet high is provided to carry off the smoke.

The power plant has been greatly improved and enlarged, giving sufficieet capacity for the operation of the plant in the best possible style.

Two 18-ton electric locomotives will be required to take care of the slag, and these are equipped with six 225 cubic feet slag cars.

A new fireproof warehouse has also been built; also a fireproof oil house equipped with the Bower system of pumps and tanks.—Cochise County Tidings.

Quartette Mine.

Special correspondence to the Reno Gazette from Searchlight says:—The mighty Quartette, which been the pride of Searchlight for many years has been sold by the Quartette Mining company to Charles H. Jonas and B. F. Miller, Jr. The deal was for a cash consideration close to the half million dollar mark, and the final payment was made several weeks before it was due.

This, the largest mining transaction that has ever been consummated in southern Nevada, includes in addition to the Quartette mine, the Rambler, Boston, Fourth of July, Red Iron and John groups of mines: the Searchlight hospital: Quartette Railroad company; Searchlight Western Telephone and Telegraph company, whose lines cover southern Nevada, and the entire mine equipment, including buildings and homes sufficient to furnish the nucleus of a small city in itself. There are 97,000 tons of stamp mill tailings which will run between 3$ and 4$ per ton now being worked through the new slime plant recently installed by the Colorado Iron works for Mr. Jonas, who was at that time operating the property on a lease.

Two years ago the company discontinued operations on its own account after having thoroughly worked the mine to the 1400 foot level, leaving barely 200 tons of mill dirt in sight in the mine. A lease was given Mr. Jonas by the company on its entire holdings, he is in turn sub-letting various of the properties and different levels of the mine to former employes —which in most cases turned out very profitably to all concerned. The mill, which had laid idle for some time, was overnauled, stamps resumed their dropping and the shipping of bullion became a regular feature of the new management.

The Quartette has had a very eventful career since it was located in 1896 by an itinerant prospector named John Swickart, who traded it for a team of mules, a plug of tobacco and 5$ to Ben McCready. When it became the property of the firm of McCready, Fisher and Hubbard, these men commenced operating it on their own account, sinking a shaft with the expectation of encountering ore when an estimated depth was attained; they had neither ore nor money to prosecute further development, and a more discouraged set of mine operators never met in what was supposed to be a final meeting.

However, the miners, who were working under Charles De Pue, now a wealthy oil man, told Mr. McCready that their faith in the property was so strong they would continue the crosscut that was started on the 200-foot level to tap the vein, without any promise of a payday, taking their chances on striking a payshoot. The last round of shots, fired on December 1, 1898, after a month's work under this novel arrangement, disclosed the ore body, the entire face of the crosscut being in rich ore. Shortly after this strike Crocker and Hopkins of Boston owners of the Boston and Chief of the Hills mines' combined with McCready and Fisher and the Quartette Mining company was organized, Hubbard selling his interest.

A shortage of water compelled the management to construct a 17-mile singe-track railroad to the Colorado river, where a 20-stamp mill was erected and operated for a few years until water sufficient was developed in the mine, when a new 40 stamp plant was erected in Searchlight. The equipment on the property at the present time consists of a 40-stamp mill, a 150-ton cyanide leaching plant a 75-ton modern cyanide slime plant, and machinery sufficient to develop a vast mineral area.

The Quartette mine has produced to date nearly 7,000,000$, and while it is impossible to get an authoritive statement regarding the tonnage and values in the mine, it has been ascertained from practical miners employed on the property that the mine promises to yield as much again. The fact that the mill is working three shifts lends color to this belief of greater prosperity in the camp.

The story of the rise of the new owners of this vast estate reads like fiction. Mr. Jonas came to Searchlight seven years ago fresh from college, entering the employ of the Quartette Mining company as a "mucker"—which position he is said to have filled very creditably for 15 months, and rose in rapid succession to miner, timberman, engineer, cyanide foreman, general mine foreman, lessee and now owner.

Mr. Miller, his partner is a native son of Nevada, having first seen the light of day in Ely 26 years ago. He is a Harvard graduate class of '09. Upon leaving college he came to Searchlight, entering the mercantile business with a limited amount of backing, and has succeeded in building up the largest general supply business in southern Nevada.

Ore Shipped From Red Rover Strike.

What is, in all probability, the richest carload of ore that ever left Phoenix was shipped from this city yesterday to one of the Douglas smelters. It came from the Red Rover mine, fifty miles north of Phoenix on Cave creek.

No accurate estimate of the value of the ore has been made. It is silver glance and tetrahedrite, or gray copper, the lowest assay made across the streak of high grade from which the shipment was taken showed 10 per cent copper. Great chunks of the ore run as high as 49 per cent copper. The silver values are enormous.

This ore comes from the richest part of a sixteen-foot vein encountered in the Red Rover less than two weeks ago. The vein averages about 200$ straight across.

The existence of the vein was never suspected before, and its discovery was a most gratifying surprise to the parties who are operating the property. It was found by following a stringer of high grade that did not look particularly promising.

Years ago a drift was run south a short distance from the 200-foot level of the main working shaft at the Red Rover. Some high grade ore was taken out of this drift. In the roof of the drift, right at the shaft a small stringer was visible.

A short time ago the present management put two men to work following this stringer. It widened out immediately and amazingly. It angled back of the hanging wall and was soon sixteen feet in width, with a six-foot streak of high grade running through its center. The vein shoots straight upward toward some ore that is visible on the surface but which, up to this time, received little attention. It is evident that there is 200 feet of stoping ground between the point where work was commenced on the stringer and the surface. Whether the vein is the same width all the way to the surface is, of course, problematical.

Within a few days another shipment of the rich ore will be made. The new strike alone cannot make the Red Rover a big producer, but it will furnish ample capital for continuing development work in other directions.

Two six-mule teams are now used in hauling ore from the Red Rover to Phoenix. It takes from eight to ten days to make a round trip. Work is progre sing steadily with a force of seven men, which will probably be increased soon.—Phoenix Gazette.

600-ton Test Mill for Inspiration

It has finally been decided to erect a 600 ton flotation test mill at a point just west of the main millsite and the machinery for its equipment has already been ordered. Erection of this test mill will require about six months, but so vast will be the program of construction of the main concentrating plant that the test mill will have had sufficient time to have demonstrated beyond all shadow of uncertainty its adaptability to Inspiration ores before that portion of the main mill's equipment need be installed. Moreover the machinery that has been ordered for the test mill's equipment may be used in the big concentrator in the event of the Inspiration's failure to use that method of ore recovery.—Silver Belt.

Much speculation is rife in Douglas concerning the contents of a large automobile which left Agua Prieta about 11 o'clock Wednesday night bound for Naco, Sonora, and under a guard of about 50 soldiers. Diligent inquiry at Agua Prieta and also at every source of probable information in Douglas failed to disclose the nature of the trip or the contents of the auto, which needed such careful guarding enroute.—Tombstone Prospector.

Seaside Excursions

Time to think of paddling in the Pacific.

You can live in a tent on the beach

or

You can live in luxury at the big resort hotels

Find out how cheaply you can go this summer.

Just phone or call

D. N. STEWART,
Agent.

Santa Fe

Santa Fe.